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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/000,442	12/04/2001	Chun-Liang Lee	3313-0431P-SP	9178

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EXAMINER	
LIN, KELVIN Y	
ART UNIT	**PAPER NUMBER**
2142	

DATE MAILED: 02/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/000,442	LEE, CHUN-LIANG	
	Examiner	Art Unit	
	Kelvin Lin	2142	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 November 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) *1,3,5-10,14,15 and 18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3,5-10,14,15 and 18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Detailed Action

Response to Arguments

Application's argue with respect to claims 1, 3, 5-10, 14-15, and 18 have been considered but are moot in view of the new ground(s) of rejection.

Response to Amended Claims

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 1, 3, 5-10, 14-15, and 18, are rejected under 35 U.S.C 103(a) as being unpatentable over Brown et al., (US Patent No. 6845410) in view of Fukuhara et al., (US Patent No. 6728908).
2. Regarding claim 1, Brown teaches features of transmission management device of a server implemented with a serial port RS232 and an I2C bus, the transmission management device comprising :
    - a transmission system connected with an independent sub-system of the server for receiving and storing data and commands of the

server and for transmitting the data and the commands of the server via the serial port RS232 to the independent sub-system connected to the serial port RS232, the transmission system including (Brown, Fig.1c, col.5, l.49-53, col.19, l.5-10, col.21, l.42-52):

- a connecting unit connected with the independent sub-system for connection with the independent sub-system and for transmitting the data and the commands of the server (Brown, col.5, l.51-54);
- a UART (Universal Asynchronous Receiver/Transmitter) control unit with a FIFO (First-in-First-Out) function as a control unit connected with the connecting unit for temporarily storing and converting the data and the commands to asynchronous signals, for transmitting the asynchronous signals to the connecting unit, and fro transmitting the interrupt signal to a CPU (Brown, fig.1c, element 21, in which the Motorola ColdFire chip includes the DUART device with receive and transmit FIFO is a well know chip in this field of art)
- a decoding unit connected with the control system for receiving the data transmitted from the control system and for transmitting the information to the control unit after decoding (Brown, col.18, l.11-15, in which the input task receives the encode message and

decodes the message and then send to destination controlled by input task);

Although Brown teaches limitation about I2C and RS232, Brown fails to indicate the interrupt scheme.

However, Fukuhara teaches:

- a control system connected with the transmission system for receiving data and commands from an external system and interrupt signals of the server and for transmitting data, and the commands from the external system and the interrupt signals of the server to the independent sub-system through the I2C bus (Fukuhara, col.8, l.50-55);

Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate Fukuhara's I2C bus interrupt scheme with Brown's I2C embedded control system.

The motivation would be for combining a transmission management device implemented with a serial port RS232 and I2C bus incorporated with Fukuhara's I2C bus interrupt scheme.

- an I/O system connected with the external system for transmitting the data and the commands of the external system to the transmission system and the control system, and for transmitting the data and the commands of the server to the external system

(Fukuhara, col.8, l.29-45),

the I/O system including:

a receiving unit connected with the external system (Fukuhara, col.4, l.62-67);

a super I/O unit connected with the receiving unit for receiving the data and the commands of the external system and transmitting the data and the commands to the transmission system and the control system (Fukuhara, col.8, l.12-23); and

a ROM unit connected with the bus for storing the data and the commands of the server (Fukuhara, fig.1, element 132); and

- an I2C bus-switching device on the I2C bus for switching a connection of the control system to independent sub-system connected to the I2C bus, thereby transmitting signals on the I2C bus to the independent sub-system via the I2C bus (Fukuhara, col.8, l.29-44).

3. Regarding claim 3, Brown further discloses the transmission management device of claim 2, wherein the connecting unit is a serial port RS232 connecting device (Brown, Fig.1c, element 24A).

4. Regarding claim 5, Brown further discloses the transmission management device of claim 1, wherein the control system comprises:

- a network connector for connecting with the external system

(Brown, col.7, l.34-40, i.e. ethernet);

- a system control unit connected with the network connector for transmitting the data and the commands of the external system and the interrupt signals to the transmission system and to the independent sub-system through the I2C bus (Brown, fig.1c, element 22, 24c, and 26); and
- a memory unit connected with the system control unit for storing the data and the commands of the external system (Brown, fig. 1c, element 36).

5. Regarding claim 6, Fukuhara further discloses the transmission management Device of claim 5, wherein the system control unit is a SOC (System On Chip) (Fukuhara, fig. 1, element 104, ASIC correspond to the SOC).

6. Regarding claim 7, Brown further discloses the transmission management device of claim 5, wherein the memory unit is a SDRAM (Synchronous Dynamic Random Access Memory) (Brwon, fig. 1c, element 36).

7. Regarding claim 8, Fukuhara further discloses the transmission management Device of claim 5, wherein a PCI Bus is installed between the network connector And the system control unit (Fukuhara, fig. 1, element 108).

8. Regarding claim 9, Brown further discloses the transmission management device of claim 5, wherein a memory bus is installed between the control unit and the memory unit (Brown, fig. 1c, element 36 and 21).

9. Regarding claim 10, Brown further discloses the transmission management

device of claim 5, wherein a data bus is installed between the transmission system and the control system (Brown, fig.1c, element 44, and 60).

10. Regarding claim 14, Brown further discloses the transmission management device of claim 1, wherein the interrupt signals are transmitted to the CPU by parallel connections (Brown, fig. 1c, element 25, and 32).

11. Regarding claim 15, Brown further discloses the transmission management device of claim 1, wherein the interrupt signals are transmitted to the CPU by serial connections (Brown, fig. 1c, element 22, and I2C master).

12. Regarding claim 18, Brown further discloses the transmission management device of claim 5, wherein the system control unit transmits the data and the commands of the external system to the transmission system through the decoding unit (Brown, col.18, l.11-15).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action, Accordingly, **THIS ACTION IS MADE FINAL.** See MEPE 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first replay is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE MONTH shortened statutory period, then the

shortened statutory period will expire on the date advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTH from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kelvin Lin whose telephone number is 571-272-3898. The examiner can normally be reached on Flexible 4/9/5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on 571-272-3868. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KYL
1/26/2006

ANDREW CALDWELL
SUPERVISORY PATENT EXAMINER